

A NEW COMBINATION IN VRIESEA

(BROMELIACEAE)

Robert W. Read
Postdoctoral Research Associate
Smithsonian Institution
Washington, D.C.

In recent years a number of bromeliad species have been transferred from the genus Tillandsia into the genus Vriesea based upon the presence of scales on the inside near the base of the petals. Although various combinations of vegetative characters along with inflorescence characters generally serve for distinguishing between the two genera, it is frequently necessary to have flowers in order to make a positive determination. The examination of flowers is of particular importance with species having narrowly triangular gray-lepidote leaves. Many poorly known species have remained in the genus Tillandsia simply because the flowers have not yet been collected.

During recent field studies in Jamaica it was possible to collect and examine carefully, many plants of "Tillandsia" incurva, a species with narrowly triangular gray-lepidote leaves. The petals were found to possess large flap-like scales adnate to the base, such as are characteristic of the genus Vriesea. In addition the somewhat inflated leaf bases which are dark-castaneous and brown-lepidote, the leaf blades which are strongly appressed-lepidote, but green adaxially and gray-lepidote abaxially, gray-lepidote over pink or purple floral bracts and the strongly angled and winged rachis, all suggest a close affinity with species which are already placed in the genus Vriesea; i.e. Vr. cereicola (Mez) L.B. Smith, Vr. hitchcockiana (L.B. Smith) L.B. Smith, Vr. patula (Mez) L.B. Smith, Vr. pereziana André, and Vr. robusta (Griseb.) L.B. Smith. It is therefore necessary to make a new combination, Vriesea incurva (Griseb.) R.W.Read, in order to place this species in proper perspective with its nearest allies.

Examination of specimens of Vriesea incurva in the herbarium of the Smithsonian Institution has disclosed that plants of the Costa Rican population differ from those in Jamaica in that the petal scales are rarely produced. Evidence of their occasional appearance was found in a specimen collected by Paul Standley at Puntarenas (No. 39533). One of the flowers examined on this specimen exhibited a single scale on only one of the petals, although there are normally two scales on each of the three petals in Jamaican plants. It appears that at least in Costa Rica the possession of petal scales is a variable character. A greater number of flowers would be necessary in order to determine the ratio of petals with scales to those without. In all other respects the Costa Rican plants are essentially indistinguishable

from the Jamaican plants. Specimens from South America and elsewhere lacked flowers so it is not possible to determine the extent of variability of this character at the present time.

VRIESEA INCURVA (Griseb.) R.W. Read, comb. nov.

Tillandsia incurva Griseb. Nachr. Ges. Wiss. Goett. for 1864:15. 1865. TYPE: Fendler 1524, Colonia Tovar, Venezuela.

T. dactylifera E. Morr. ex Baker, Handb. Bromel. 181. 1889.

TYPE: Ernst s.n. Caracas, near San Chorquiz, Venezuela.

T. digitata Mez in DC. Monogr. Phan. 9:715. 1896.

TYPE: Van Houtee No. 6. Costa Rica.

T. castaneo-bulbosa Mez & Wercklé, Bull. Herb. Boiss. II. 3:140. 1903. TYPE: Wercklé 16189, Environs de Cartago, Costa Rica.

Distribution: Greater Antilles, Costa Rica to Venezuela and Bolivia.

Vriesea incurva has been seen only in the cooler habitats in Jamaica and appears to be a strict epiphyte in regions frequently bathed in fogs or clouds on mountain ridges from 2500 feet elevation on Mount Diablo to over 7000 feet elevation in the Blue Mountains.

A complete description, an illustration and specimen citations appear in Smith, L.B., Contributions to the United States National Herbarium vol. 29, page 499. 1951. The report of this species in Florida is based on a collection by Blodgett, in Key West, and is not Vr. incurva but is more likely a form of Tillandsia valenzuelana.

Specimens examined from Jamaica are; Blue Mountains; J.A. Harris & J.V. Lawrence C 15211 (US); Harris 5131 (as "Tillandsia harrisii Mez n. sp.", UCWI); C.D. Adams 10660 (UCWI); R.W. Read 1723 (US); Mount Diablo; R.W. Read 1762 (US).